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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Bernd RIEDL et al.		Confirmation No.:	6634
Serial No.:	10/042,203	Examiner:	Rita J. Desai
Filed:	January 11, 2002	Group Art Unit:	1625

Title: ω-CARBOXYARYL SUBSTITUTED DIPHENYL UREAS AS RAF KINASE INHIBITORS

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.56, 1.97 AND 1.98

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Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

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CITED MATERIALS

☐ Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. _____, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).

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☐ An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).

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OTHER INFORMATION

None

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Respectfully submitted,

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Date: October 28, 2005
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Sheet 1 of 9

Complete if Known	
Application Number	10/042,203
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1625
Examiner Name	Rita J. Desai
Attorney Docket Number	BAYER-25A

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	A1	2002/017507	A1	Santora et al.	11-21-2002
	A2	2002/0065283	A1	McMahon et al.	05-30-2002
	A3	2002/0065296	A1	Dumas et al.	05-30-2002
	A4	2004/0209905	A1	Kubo et al.	10-21-2004
	A5	5063247		Sekiya et al.	11-05-1991
	A6	5151344		Abe et al.	09-29-1992
	A7	5658903		Adams et al.	08-19-1997
	A8	5710094		Minami et al.	01-20-1998
	A9	5559137		Adams et al.	09-24-1996
	A10	5808080		Bell et al.	09-15-1998
	A11	6297381	B1	Cirillo et al.	10-02-2001
	A12	6310068	B1	Böttcher et al.	10-30-2001
	A13	6329415	B1	Cirillo et al.	12-11-2001
	A14	6358945	B1	Breitfelder et al.	03-19-2002
	A15	6372773	B1	Regan	04-16-2002
	A16	6492393	B1	Breitfelder et al.	12-10-2002
	A17	6525046	B1	Cirillo et al.	02-25-2003
	A18	6583282	B1	Zhang et al.	06-24-2003
	A19	6608052	B2	Breitfelder et al.	08-19-2003

FOREIGN PATENT DOCUMENTS

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	B1	WO	02/14311	A2	Amgen Inc.	02-21-2002		
	B2	WO	02/32872	A1	Eisai Co. Ltd.	04-25-2002		
	B3	WO	02/44158	A1	Pfizer Products Inc.	06-06-2002		
	B4	WO	02/07772	A2	Boehringer Ingelheim	01-31-2002		
	B5	WO	02/32872	A1	Eisai Co. Ltd.	04-25-2002		
	B6	WO	01/04115	A2	Boehringer Ingelheim	01-18-2001		
	B7	WO	99/62890	A1	Pfizer Products Inc.	12-09-1999		

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	B8	JP	01200254	A2	Hirabayashi Shigeto	08-11-1989		
	B9	JP	01102461	A2	Hirabayashi Shigeto	04-20-1989		
	B10	JP	01259360	A2	Hirabayashi Shigeto	10-17-1989		
	B11	JP	01009455	A2	Megumi et al.	01-12-1989		
	B12	JP	06075172	B4	Megumi et al.	09-07-1988		
	B13	JP	06120039	A2	Hideki	10-02-1992		
	B14	JP	03144634	A2	Shigeto et al.	06-20-1991		
	B15	JP	03198049	A2	Jiro et al.	12-27-1989		
	B16	JP	02150840	A2	Toshihiko et al.	06-11-1990		
	B17	JP	02105016	A2	Hideo et al.	04-17-1990		
	B18	JP	02108048	A2	Minoru et al.	04-19-1990		
	B19	JP	02035450	A2	Toshihiko et al.	07-26-1988		
	B20	JP	61020039	A2	Ryosuke	07-06-1984		
	B21	WO	00/50425	A1	Boehringer Ingelheim	08-31-2000		
	B22	WO	98/34929	A1	Smithkline Beecham	08-13-1998		
	B23	WO	98/32439	A1	Smithkline Beecham	07-30-1998		
	B24	WO	01/09088	A1	Kirin Beer Kabushiki	02-08-2001		
	B25	WO	01/04115	A2	Boehringer Ingelheim	01-18-2001		
	B26	WO	2005/048948	A2	Ambit Biosciences	06-02-2005		
	B27	WO	02/062763	A2	Bayer Corporation	08-15-2002		
	B28	WO	02/083628	A1	Boehringer Ingelheim	10-24-2002		
	B29	WO	02/085857	A2	Bayer Corporation	10-31-2002		
	B30	WO	02/085859	A1	Bayer Corporation	10-31-2002		
	B31	WO	97/09973	A2	Univ. of California	03-20-1997		
	B32	WO	02/062763	A2	Bayer Corporation	08-15-2002		
	B33	WO	03/068229	A1	Bayer Corporation	08-21-2003		
	B34	WO	03/068746	A1	Bayer Corporation	08-21-2003		
	B35	WO	03/099771	A2	Novartis AG	12-04-2003		
	B36	WO	03/082272	A1	Chiron Corp.	10-09-2003		
	B37	WO	02/059102	A2	Aventis Pharma	08-01-2002		

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Sheet 3 of 9

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Application Number	10/042,203
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1625
Examiner Name	Rita J. Desai
Attorney Docket Number	BAYER-25A

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	B38	WO	01/07411	A1	Banyu Pharmaceutical	02-01-2001		
	B39	UK	1110099		Julia	06-07-1966		
	B40	WO	2004078746	A2	Boyer et al.	09-16-2004		
	B41	WO	2005037273	A1	Ramurthy et al.	04-28-2005		
	B42	WO	2005037285	A1	Ramurthy et al.	04-28-2005		
	B43	WO	2005049603	A1	Finsinger et al.	06-02-2005		
	B44	WO	2005019192	A1	Hoelzemann et al.	03-03-2005		
	B45	WO	2004043374	A2	Anderson et al.	05-27-2004		
	B46	WO	2005048948	A2	Milanov et al.	06-02-2005		
	B47	WO	2005042520	A1	Staehle et al.	05-12-2005		
	B48	WO	2005037829	A1	Staehle et al.	04-28-2005		
	B49	WO	2005004864	A1	Buchstaller et al.	01-20-2005		
	B50	WO	2004037789	A2	Buchstaller et al.	05-06-2004		
	B51	WO	2005047283	A1	Hoelzemann et al.	05-26-2005		
	B52	WO	2005002673	A1	Gill et al.	01-13-2005		
	B53	WO	02059081	A2	Hocker et al.	08-01-2002		
	B54	WO	2005004863	A1	Buchstaller et al.	01-20-2005		
	B55	WO	2005032548	A1	Amiri et al.	04-14-2005		
	B56	WO	2004085425	A1	Dipietro et al.	10-07-204		
	B57	WO	02059102	A2	Deprez et al.	08-01-2002		
	B58	WO	0050425	A1	Cirillo et al.	08-31-2000		
	B59	WO	0055152	A1	Cirillo et al.	09-21-2000		
	B60	WO	0157008	A1	Cusack et al.	08-09-2001		
	B61	WO	0107411	A1	Hayama et al.	02-01-2001		
	B62	WO	2005058832	A1	Finsinger et al.	06-30-2005		
	B63	WO	2005005389	A2	Bruge et al.	01-20-2005		
	B64	WO	2004085399	A1	Buchstaller et al.	10-07-2004		
	B65	WO	02083642	A1	Breitfelder et al.	10-24-2002		
	B66	WO	0071532	A1	Gant et al.	11-30-2000		
	B67	WO	0210141	A1	Ahliganian et al.	02-07-2002		

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Application Number	10/042,203
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1625
Examiner Name	Rita J. Desai
Attorney Docket Number	BAYER-25A

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	B68	WO	9962890	A1	Larson et al.	12-09-1999		
	B69	WO	0109088	A1	Padia et al.	02-08-2001		
	B70	WO	0214281	A1	Cochran et al.	02-21-2002		
	B71	WO	02083628	A1	Cirillo et al.	10-24-2002		
	B72	WO	2004019941	A1	Buchstaller et al.	03-11-2004		
	B73	WO	0035454	A1	Ko et al.	06-22-2000		
	B74	WO	0104115	A2	Zhang et al.	01-18-2001		
	B75	WO	0218346	A1	Cooper et al.	03-07-2002		
	B76	WO	0026203	A1	Pevarello et al.	05-11-2000		
	B77	WO	0043366	A1	Kirin et al.	07-27-2000		
	B78	WO	0056331	A1	Stamos et al.	09-28-2000		
	B79	WO	9820868	A1	Tracey et al.	05-22-1998		
	B80	WO	9203413	A1	Lythgoe et al.	03-05-1992		
	B81	WO	03047523	A2	Lyons et al.	06-12-2003		
	B82	WO	03068228	A1	Dumas et al.	08-21-2003		
	B83	EP	1256587	A1	Omura et al.	11-13-2002		
	B84	EP	1199306	A1	Hayama et al.	04-24-2002		
	B85	EP	0709225	B1	Minami et al.	08-05-1998		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C1	Nickel et al., "Carboxylic acid analogues of suramin, potential filaricides," *Indian Journal of Chemistry*, Vol. 30B, February 1991, p. 182-187	
	C2	Duam et al., "The ins and outs of Raf kinases," TIBS 19, November 1994, p. 474-480.	
	C3	Campbell et al., "Increasing complexity of Ras signaling," *Oncogene*, (1998) 17, 1395-1413	
	C4	Bolton et al., "Ras oncogene directed approaches in cancer chemotherapy," *Annual Reports in Medicinal Chemistry*, 29, pp. 165-174	
	C5	Moelling et al., "Signal transuction as target of gene therapy," Institute of Medical Virology, University of Zürich, *Recent Results in Cancer Research*, Vol. 142, pp. 63-71	

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First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1625
Examiner Name	Rita J. Desai
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	C6	Internal Medicine, 4th Edition, 1994, pp. 699-715	
	C7	Johannes L. Bos, "Ras oncogenes in human cancer: a review," *Cancer Research*, 49, 4682-4689, September 1, 1989	
	C8	Kempter et al., "Synthese potentieller Pflanzenschutz- und Schädlingsbekämpfungsmittel aus substituierten Anilinen," Pädagosische Hochschule, Eingegangen am 1.7.1982, 101-120	
	C9	Lyons et al., "Discovery of a novel Raf kinase inhibitor," *Endocrine-Related Cancer*, (2001) 8, 219-225	
	C10	Lowinger et al., "Design and discovery of small molecules targeting Raf-1 kinase," *Current Pharmaceutical Design*, 2002, 8, 2269-2278	
	C11	Dumas et al., "Recent developments in the discovery of protein kinase inhibitors from the urea class," *Current Opinion in Drug Discovery & Development*, 2004, 7(5):600-616	
	C12	Dumas, "Protein kinase inhibitors from the urea class," *Current Opinion in Drug Discovery & Development*, 2002, 5(5):718-727	
	C13	Lowinger et al., "Discovery of novel class of potent Raf kinase inhibitors: structure activity relationships," *Clinical Cancer Research*, Vol. 6, Nov. 2000, 4533s	
	C14	Hotte et al., "BAY 43-9006: Early Clinical Data in Patients with Advanced Solid Malignancies," *Current Pharmaceutical Design*, 2002, 8, 2249-2253	
	C15	Lee et al., "BAY-43-9006: Bayer/Onyx," *Current Opinion in Investigational Drugs*, 2003, 4(6):757-763	
	C16	Sorbara et al., "BAY-43-9006," *Drugs of the Future*, 2002, 27(12):1141-1147	
	C17	Khire et al., "Omega-carboxypyridyl substituted ureas as raf kinase inhibitors: SAR of the amid substituent," *Bioorg. Med. Chem. Lett.*, 14 (2004), 783-786	
	C18	Wilhelm et al., "BAY 43-9006 Exhibits broad spectrum oral antitumor activity and targets the RAF/MEK/ERK pathway and receptor tyrosine kinases involved in tumor progression and angiogenesis," *Cancer Research*,. 64, 7099-7109, October 1, 2004	
	C19	Smith, et al., "Discovery of heterocyclic ureas as a new class of raf kinase inhibitors: identification of a second generation lead by a combinatorial chemistry approach." *Bioorganic & Medicinal Chemistry Letters*, 11 (2001) 2775-2778	
	C20	Bankston et al., "A sealeable synthesis of BAY 43-9006: a potent raf kinase inhibitor for the treatment of cancer," *Organic Process Research & Development*, 2002, 6, 777-781	

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Examiner Name	Rita J. Desai
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NON PATENT LITERATURE DOCUMENTS (cont'd.)

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	C21	Strumberg et al., "Results of phase I pharmacokinetic and pharmacodynamic studies of the raf kinase inhibitor BAY 43-9006 in patients with solid tumors," *International Journal of Clinical Pharmacology and Therapeutics*, Vol. 40, No. 12/2002 (580-581)	
	C22	Chang et al., "BAY 43-9006 (Sorafenib) inhibitors ectopic (s.c.) and orthotopic growth of a murine model of renal adenocarcinoma (Renca) predominantly through inhibition of tumor angiogenesis," 96th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
	C23	Panka et al., "BAY 43-9006 induces apoptosis in melanoma cell lines," 96th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
	C24	Auclair, et al., "BAY 43-9006 (Sorafenib) is a potent inhibitor of FLT3 tyrosine kinase signaling and proliferation in AML cells," 96th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
	C25	Murphy et al., "BAY 43-9006 controls tumor growth through inhibition of vascular development," 96th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
	C26	Spronsen et al., "Novel treatment strategies in clear-cell metastatic renal cell carcinoma," *Anti-Cancer Drugs*, 2005, 16:709-717	
	C27	Thaimattam et al., "3D-QSAR CoMFA, CoMSIA studies on substituted ureas as Raf-1 kinase inhibitors and its confirmation with structure-based studies," *Bioorganic & Medicinal Chemistry*, 12(2004) 6415-6425	
	C28	Danson et al., "Improving outcomes in advanced malignant melanoma," *Drugs*, 2005, 65(6):733-743	
	C29	Heim et al., "Antitumor effect and potentiation or reduction in cytotoxic drug activity in human colon carcinoma cells by the Raf kinase inhibitor (RKI) BAY 43-9006," *International Journal of Clinical Pharmacology and Therapeutics*, Vol. 41, No. 12/2003 (616-617)	
	C30	Richly et al., "Results of a phase I trial of BAY 43-9006 in combination with doxorubicin in patients with primary hepatic cancer," *International Journal of Clinical Pharmacology and Therapeutics*, Vol. 42, No. 11/204 (650-651)	
	C31	Mross et al., "Drug-drug reaction pharmacokinetic study with the Raf kinase inhibitor (RKI) BAY 43-9006 administered in combination with irinotecan (CPT-11) in patients with solid tumors," *International Journal of Clinical Pharmacology and Therapeutics*, Vol. 41, No. 12/2003 (618-619)	
	C32	Richly et al., "A phase I clinical and pharmacokinetic study of the Raf kinase inhibitor (RKI) BAY 43-9006 administered in combination with doxorubicin in patients with solid tumors," *International Journal of Clinical Pharmacology and Therapeutics*, Vol. 41, No. 12/2003 (620-621)	

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	C33	DeGrendele, "Activity of the raf kinase inhibitor BAY 43-9006 in patients with advanced solid tumors," *Clinical Colorectal Cancer*, May 2003, pp. 16-18	
	C34	Hubbard, "Oncogenic mutations in B-Raf: some losses yield gains," Skirball Institute of Biomolecular Medicine and Department of Pharmacology, New York University School of Medicine, New York, NY	
	C35	Thompson et al., "Recent progress in targeting the Raf/MEK/ERK pathway with inhibitors in cancer drug discovery," *Curr. Opin. Pharmacol.*, 2005 Aug., 5(4):350-6	
	C36	Moore et al., "Phase I study to determine the safety and pharmacokinetics of the novel Raf kinase and VEGFR inhibitor BAY 43-9006, administered for 28 days on/7 days off in patients with advanced, refractory solid tumors," *Annals of Oncology*, 16:1688-1694, 2005	
	C37	Ahmad et al., "Kinase inhibition with BAY 43-9006 in renal cell carcinoma," *Clinical Cancer Research*, Vol. 10, 6388s-6392s, 15 Sept. 2004	
	C38	Wan et al., "Mechanism of activation of the RAF-ERK signaling pathway by oncogenic mutations of B-RAF," *Cell*, Vol. 116, 855-867, 19 March 2004	
	C39	Hanson, "Pulmonary-Allergy, Dermatological, Gastrointestinal & Arthritis, Inhibitors of p38 kinase," *Exp. Opin. Ther. Patents*, (1997) 7(7):729-733	
	C40	Strumberg et al., "Phase I clinical and pharmacokinetic study of the novel raf kinase and vascular endothelial growth factor receptor inhibitor BAY 43-9006 in patients with advanced refractory solid tumors," *Journal of Clinical Oncology*, Vol. 23, No. 5, 10 Feb. 2005, 965-972	
	C41	Regan et al., "Pyrazole urea-based inhibitors of p38 MAP kinase: from lead compound to clinical candidate," *J. Med. Chem.*, 2002, 45, 2994-3008	
	C42	Clark et al., "Safety and pharmacokinetics of the dual action raf kinase and vascular endothelial growth factor receptor inhibitor, BAY 43-9006, in patients with advanced, refractory solid tumors," *Clin. Cancer Res.*, 2005:11(15), 1 August 2005, 5472-5480	
	C43	Wilson et al., "The structural basis for the specificity of pyridinylimidazole inhibitors of p38 MAP kinase," *Chemistry & Biology*, 1997, Vol. 4, No. 6, 423-431	
	C44	Hotte et al., "BAY 43-9006: early clinical data in patients with advanced solid malignancies," *Current Pharmaceutical Design*, 2002, 8, 2249-2253	
	C45	Jeffcoat et al., "The metabolism and toxicity of halogenated carbanilides," *Drug Metabolism and Deposition*, Vol. 5, No. 2, 157-166	
	C46	Murata et al., "Facile synthesis of new pyrrolo[3,4-*d*]pyrimidine-2,4-diones," *Chem. Pharm. Bull.*, 22(5) 1212-1213 (1974)	

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	C47	Yasuo et al, "Intra-arterial ACNU, CDDP chemotherapy for brain metastases from lung cancer: comparison of cases with and without intra-arterial mannitol infusion," *Neurol. Surg.*, (1993) vol. 21, no. 6, pp. 513-518	
	C48	Murata et al., "Facile synthesis of new pyrrolo[3,4-d]pyrimidine-2,4-diones," *Chemical & Pharmaceutical Bulletin*, (1974), 22(5):1212-13	
	C49	Hanson, "Inhibitors of p38 kinase," *Expert Opinion on Therapeutic Patents*, July 1997, vol. 7, no. 7, pp. 729-733(5)	
	C50	Garcia-Lopez et al., "New routes for the synthesis of pyrrolo[3,2-d]- and -[2,3-d]pyrimidine systems starting from a common pyrrole derivative," *Journal of the Chemical Society*, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1978), (5), 483-7	
	C51	Wilhelm et al., "BAY 43-9006: preclinical data," *Curr Pharm Des*, 2002, 8(25):2255-7	
	C52	Wright et al., "Clinical trials referral resource. Current clinical trials of BAY 43-9006, Part 1," *Oncology*, 2005 Apr, 19(4):499-502	
	C53	Dumas, "Protein kinase inhibitors from the ureas class," *Current Opinion in Drug Discovery & Development*, 2002, Vol. 5, No. 5, 718-727	
	C54	Patent Abstracts of Japan, Publication No. 02-023337, published 01-28-1990	
	C55	Patent Abstracts of Japan, Publication No. 02-022650, published 01-25-1990	
	C56	Wisaner et al., "Analogues of platelet activating factor. 7. Bis-aryl amide and bis-aryl urea receptor antagonists of PAF," *J. Med. Chem.*, 1992, 35, 4779-4789	
	C57	Ravi et al., "Activated raf-1 causes growth arrest in human small cell lung cancer cells," *J. Clin. Invest.*, pp. 153-159	
	C58	Lemoine, "Overview of ras oncogenes and their clinical potential," Chapter 10,	
	C59	*Drug, facts and comparisons*, 1994 Edition, pp. 2703-2705	
	C60	Siu et all, "Phase I study of oral raf-1 kinase inhibitor BAY 43-9006 with gemcitabine in patients with advanced solid tumors," *Proc Am Soc Clinic Oncol*, 22:207, 2003 (abstr 828)	
	C61	Escudier et al., "Randomized phase III trial of the raf kinase and VEGFR inhibitor sorafenib (BAY 43-9006) in patients with advanced renal cell carcinoma (RCC)," Meeting: *2005 ASCO Annual Meeting*, Category: Genitourinary Cancer, Subcategory: Kidney Cancer, Abstract No. 4510	
	C62	Eisen et al., "Phase I trial of BAY 43-9006 (sorafenib) combined with dacarbazine (DTIC) in metastatic melanoma patients," Meeting: *2005 ASCO Annual Meeting*, Category: Melamona, Subcategory: Melamona, Abstract No. 7508	

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	C63	Adjei et al., "A phase I study of BAY 43-9006 and gefitinib in patients with refractory or recurrent non-small-cell lung cancer (NSCLC)," Meeting: *2005 ASCO Annual Meeting*, Category: Developmental Therapeutics: Molecular Therapeutics, Subcategory: Antiangiogenic or Antimetastatic agents, Abstract No. 4510	
	C64	Carling et al., "1-(3-cyanobenzylpiperidin-4-yl)-5-methyl-4-phenyl-1,3-dihydroimidazol-2-one: A selective high-affinity antagonist for the human dopamine D_4 receptor with excellent selectivity over ion channels," *J. Med. Chem.*, 1999, 42, 2706-2715	
	C65	Van Muijlwijk-Koezen et al., "Isoquinoline and quinazoline urea analogues as antagonists for the human adenosine A_3 receptor," *J. Med. Chem.*, 2000, 43, 2227-2238	
	C66	Eisenhauer et al., "Impact of new non-cytotoxics in the treatment in ovarian cancer," *Int. J. Gynecol Cancer*, 2001, 11 (Suppl. 1), 68-72	
	C67	Kubo et al., "Synthesis and structure-activity relationship of quinazoline-urea derivatives as novel orally active VEGF receptor tyrosine kinase selective inhibitors," #913, XP-001152608	
	C68	Carter et al, "Anti-tumor efficacy of the orally active raf kinase inhibitor BAY 43-9006 in human tumor xenograft models," #4954, XP-001145482	
	C69	Strumberg et al., "Phase I and pharmacokinetic study of the raf kinase inhibitor bay 43-9006 in patients with locally advanced or metastatic cancer," #2921, XP-001145481	
	C70	Dumas et al., "1-phenyl-5-pyrazolyl ureas: potent and selective p38 kinase inhibitors," *Bioorganic & Medicinal Chemistry Letters*, 10 (2000), 2051-2054	
	C71	Riedl et al., "Potent raf kinase inhibitors from the diphenylurea class: structure activity relationships," #4956, XP-001145518	
	C72	Iwadate et al., "Intra-arterial ACNU, CDDP chemotherapy for brain metastases from lung cancer: comparison of cases with and without intra-arterial mannitol infusion," Dept of Neurological Surgery, Chiba Cancer Center Hospital, Clinical Trial, Journal Article, Randomized Controlled Trial, Vol. 21, No. 6, 513-518	
	C73	Geiger et al., "Antitumor activity of a C-raf antisense oligonucleotide in combination with standard chemotherapeutic agents against various human tumors transplanted subcutaneously into nude mice," *Clinical Cancer Research*, Vol. 3, 1179-1185, July 1997	
	C74	Cunningham et al., "A phase I trial of H-ras antisense oligonucleotide ISIS 2503 administered as a continuous intravenous infusion in patients with advanced carcinoma," *Cancer*, September 2001, Vol. 92, No. 5, 1265-1271	

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